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What is claimed is:

A device for [reading an image] sensing a light comprising:

a semiconductor layer formed on a substrate, said semiconductor layer comprising [an image] a light sensor region and a semiconductor switch region adjacent to and operatively connected with said [image] light sensor region,

wherein said semiconductor layer has a [semi-amorphous] structure comprising a mixture of amorphous and crystalline structures, in which a Raman spectrum of the semiconductor\film exhibits a peak deviated from that which stands for a single crystal of the semiconductor.

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- The device of claim 1 wherein said semiconductor layer comprises hydrogen floped silicon.
- The device of claim 1/wherein said semiconductor switch region comprises a thin film transistor of which active region is formed of said semiconductor layer.

The device of claim 1 wherein said [image] <u>light</u> sensor region comprises Lat least two semiconductor regions having different electrical properties and forming a junction.

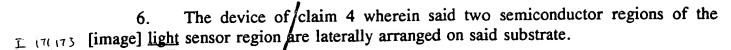
A device for [reading an image] sensing a light produced by a process comprising the steps of:

depositing a semiconductor material on a substrate;

forming a photoelectric conversion semiconductor device on said substrate comprising a p-type impurity semiconductor region, an intrinsic semiconductor region, and an n-type impurity semiconductor region, a semiconductor region of said photoelectric conversion\semieonductor device being made of said semiconductor material; and

forming a thin film transistor on said substrate which constitutes an electric circuit required to [read an image] sense a light, a semiconductor region of said thin film transistor being made of said semiconductor material;

wherein said semiconductor regions are arranged in order with said p-type impurity semiconductor region adjacent said intrinsic semiconductor region and said intrinsic semiconductor region adjacent said n-type impurity semiconductor region in said photoelectric conversion semiconductor device, said order being in a direction perpendicular to that in which [an image] a light to be [read] sensed is incident thereon.



The device of claim 5 wherein said photoelectric conversion semiconductor device further comprises an amorphous semiconductor film provided on a side of said 171 (13 intrinsic semiconductor region on which said [image] light is incident through said 1 amorphous semiconductor film.

A device for [reading an image] sensing a light comprising: 8.

a semiconductor layer formed on a substrate, said semiconductor layer I 171 (73 comprising [an image] a light sensor region and a semiconductor switch region adjacent to and operatively connected with said [intage] light sensor region, [.]

wherein said semiconductor layer has at least one of an electron mobility

15-100 cm²/V sec and a hole mobility 10-100 cm²/V sec.

A device for [reading an mage] sensing a light comprising: 9. I 171 173.

a semiconductor layer formed on a substrate, said semiconductor layer I 171 [73] comprising [an image] a light sensor region and a semiconductor switch region adjacent to and operatively connected with said [image] light sensor region, [.]

wherein said semiconductor layer has a [semi-amorphous] structure in which a Raman spectrum of the semiconductor film exhibits a peak deviated from that which stands for a single crystal of the/semiconductor, and said semiconductor switch region comprises complementary p-channel and n-channel thin film transistors.

- The device of claim 9 wherein said semiconductor film comprises hydrogen 10. doped silicon.
- The device of claim 9 wherein said [image] light sensor region comprises I 17117年9 at least two semiconductor regions having different electrical properties and forming a junction.
- The device of claim 11 wherein said two semiconductor regions in said [image] light sensor region are arranged in a lateral direction on said substrate.
 - The device of claim 9 wherein said semiconductor layer has at least one of an electron mobility in a range from 15 to 100 cm²/V sec and a hole mobility in a range from 10 to 100 cm²/V sec.
 - The device of claim 1 wherein said semiconductor layer has at least one of an electron mobility in a range from 15 to 100cm²/V sec and a hole mobility in a range from 10 to 100 cm²/V sec.